## *In vitro* human metabolism and inhibition potency of verbascoside for CYP enzymes

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Fig 1S: Verbascoside structure



Fig 2S: The ESI EIC scan of verbascoside (Standard). The area of interest is circled in red (peak= 4.714)



Fig 3S: The ESI EIC scan of the ethanolic extract of *Lippia scaberrima*, confirming the presence of verbascoside within the extract. The area of interest is circled in red (peak= 4.714)





Fig 4S: The recombinant CYP 1A2 inhibition potential of verbascoside after incubation at various concentrations

CYP1B1 (TFD008\_1)



Fig 5S: The recombinant CYP 1B1 inhibition potential of verbascoside after incubation at various concentrations

CYP2A6 (Coumarin)



Fig 6S: The recombinant CYP 2A6 inhibition potential of verbascoside after incubation at various concentrations



Fig 7S: The recombinant CYP 2C19 inhibition potential of verbascoside after incubation at various concentrations





Fig 8S: The recombinant CYP 2D6 inhibition potential of verbascoside after incubation at various concentrations



Fig 9S: The recombinant CYP 3A4 inhibition potential of verbascoside after incubation at various concentrations



Fig 10S: The microsomal CYP1A1 inhibition potential of verbascoside after incubation at various concentrations



Fig 11S: The microsomal CYP1A2 inhibition potential of verbascoside after incubation at various concentrations



Fig 12S: The microsomal CYP1B1 inhibition potential of verbascoside after incubation at various concentrations



Fig 13S: The microsomal CYP2A6 inhibition potential of verbascoside after incubation at various concentrations



Fig 14S: The microsomal CYP2C19 inhibition potential of verbascoside after incubation at various concentrations



Fig 15S: The microsomal CYP2D6 inhibition potential of verbascoside after incubation at various concentrations



Fig 16S: The microsomal CYP3A4 inhibition potential of verbascoside after incubation at various concentrations